UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,165	09/15/2003	Ramgopal (Paul) K. Reddy	042390.16242	2833

45209   7590   11/16/2007

INTEL/BLAKELY
1279 OAKMEAD PARKWAY
SUNNYVALE, CA 94085-4040

EXAMINER
HO, HUY C

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
11/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Office Action Summary	**Application No.**	**Applicant(s)**
		10/663,165	REDDY ET AL.
		Examiner	**Art Unit**	
		Huy C. Ho	2617	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>17 October 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-23 and 25-32</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-23 and 25-32</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>15 September 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR

1.17(e), was filed in this application after final rejection. Since this application is eligible for

continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely

paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 10/17/2007 has been entered.

Response to Arguments

2.   Applicant's arguments filed 10/17/2007 have been fully considered but they are not persuasive.

The argued features, i.e., using credential information stored in a subscriber identity module

(SIM) associated with a General Packet Radio Service (GPRS) adapter to authenticate access to a new

wireless local area network (WLAN), wherein communications with the SIM and the WLAN are carried

out using extensible authentication protocol (EAP) reads upon cited references Ahmavaara and in view

of Melpignano as follows.

Ahmavaara discusses a subscriber's information within a SIM card of user equipment UE is used

for authentication process when a user tries to access from one network to another, and the

authentication is based on the EAP protocol. Therefore, Ahmavaara discloses the limitation of using

credential information stored in a subscriber identity module (SIM) associated with a General Packet

Radio Service (GPRS) adapter to authenticate access to a wireless local area network (WLAN), wherein

communications with the SIM is carried out using extensible authentication protocol (EAP). Ahmavaara

also discusses the method and system for providing access via a first network, which can be a WLAN or

other networks to a service of a second network, which can be GPRS or other networks, thus the role of

the first network and the second network is changeable in the invention (see sections [1]). Further,

Ahmavaara discusses in the background of the invention that there is no problem in the case when a

user connects to a GPRS service network, all authentication information required for further

connection to other networks, while there exists a problem for connection to other networks when a

user is first connected in a WLAN network because of the missing of dedicated signaling (see sections

[6]-[7]). Therefore, Ahmavaara's objection of the invention is to provide access to any other second

network, such as GPRR or WLAN, via the first network, such as WLAN successfully (sections [8]-[18]).

Now, Melpignano is discussing a mobile station comprises a combo chipset that provides

functionality to operate in multiple standards such as IEEE 802.11, WLAN, GSM/GPRS and Bluetooth,

and the mobile station is adapted to switch and operate under any said wireless communication

standards (see the abstract, sections [62], [71]-[72], [176]-[178], [181]).

Per discussion above, Ahmavaara, and further in view of Melpignano, discloses using credential

information stored in a subscriber identity module (SIM) associated with a General Packet Radio Service

(GPRS) adapter to authenticate access to a new wireless local area network (WLAN), wherein

communications with the SIM and the WLAN are carried out using extensible authentication protocol

(EAP).

As a result, the argued features are written such that they read upon the cited references.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

4.   This application currently names joint inventors. In considering patentability of the claims

under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was

commonly owned at the time any inventions covered therein were made absent any evidence to the

contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and

invention dates of each claim that was not commonly owned at the time a later invention was made in

order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e),

(f) or (g) prior art under 35 U.S.C. 103(a).

5.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966),

that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are

summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or
        nonobviousness.

6.   **Claims 1-23 and 25-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ahmavaara et al. (2005/0272465) and further in view of **Melpignano (2005/0176473)**.

        Consider claim 1, (Currently amended) Ahmavaara teaches a method (**see the abstract**),

comprising:

        using credential information stored in a subscriber identity module (SIM) associated with a

General Packet Radio Service (GPRS) adapter to authenticate access to a <u>new</u> wireless local area

network (WLAN), wherein communications with the SIM <u>and the WLAN are</u> is carried out using

extensible authentication protocol (EAP) (**see the abstract, figures 1 and 2, pars [8]-[18], [25]-[31]**

and [34]). However, Ahmavaara does not specifically show WLAN adapter and the GPRS adapter. It is

noticeable Ahmavaara teaches the method of multiple simultaneous connections to different services

in different networks, i.e., WLAN and GPRS networks of a user equipment (**see the abstract, figures 1**

and 2, par [16]). In an analogous art, Melpignano teaches an (WLAN) adapter and (GPRS) adapter (**see**

the abstract, pars [16], [18], [22], [62], where describing the multi-standard wireless hardware

adapted to support wireless operation of client devices, so disclosing the existence of WLAN and

GPRS adapters). Therefore, it would have been obvious to a person of ordinary skill in the art at the

time of the invention was made to modify Ahmavaara invention, and have a (WLAN) adapter and

(GPRS) adapter, as taught by Melpignano, thus improving wireless communication as discussed by

Melpignano (**see pars [16]-[18]**).

Consider claim 9, (currently amended) Ahmavaara teaches a computer-readable medium including machine readable instructions that, if executed by a computer system, cause the computer system to perform a method comprising:

using credential information stored in a subscriber identity module (SIM) associated with a General Packet Radio Service (GPRS) adapter to authenticate access to a new wireless local area network (WLAN), wherein communications with the SIM and the WLAN are is carried out using extensible authentication protocol (EAP) **(see the abstract, figures 1 and 2, pars [8]-[18], [25]-[31] and [34])**. However, Ahmavaara does not specifically show WLAN adapter and the GPRS adapter. It is noticeable Ahmavaara teaches the method of multiple simultaneous connections to different services in different networks, i.e., WLAN and GPRS networks of a user equipment **(see the abstract, figures 1 and 2, par [16])**. In an analogous art, Melpignano teaches an (WLAN) adapter and (GPRS) adapter **(see the abstract, pars [16], [18], [22], [62], where describing the multi-standard wireless hardware adapted to support wireless operation of client devices, so disclosing the existence of WLAN and GPRS adapters)**. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Ahmavaara invention, and have a (WLAN) adapter and (GPRS) adapter, as taught by Melpignano, thus improving wireless communication as discussed by Melpignano **(see pars [16]-[18])**.

Consider claim 17, (Currently amended) Ahmavaara discloses a mobility client to initiate requests for credential information from the SIM to authenticate access to a WLAN when the mobility recognizes an access point, wherein said requests for the credential information are communicated to the SIM using extensible authentication protocol (EAP) **(see the abstract, figures 1 and 2, pars [8]-[18], [25]-[31] and [34])**.

using credential information stored in a subscriber identity module (SIM) associated with a General Packet Radio Service (GPRS) adapter to authenticate access to a new wireless local area network (WLAN), wherein communications with the SIM is carried out using extensible authentication protocol (EAP) **(see the abstract, figures 1 and 2, pars [8]-[18], [25]-[31] and [34])**. However, Ahmavaara does not specifically show WLAN adapter and the GPRS adapter. It is noticeable Ahmavaara

teaches the method of multiple simultaneous connections to different services in different networks,

i.e., WLAN and GPRS networks of a user equipment (**see the abstract, figures 1 and 2, par [16]**). In an

analogous art, Melpignano teaches an (WLAN) adapter and (GPRS) adapter (**see the abstract, pars

[16], [18], [22], [62], where describing the multi-standard wireless hardware adapted to support

wireless operation of client devices, so disclosing the existence of WLAN and GPRS adapters**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the

invention was made to modify Ahmavaara invention, and have a (WLAN) adapter and (GPRS) adapter,

as taught by Melpignano, thus improving wireless communication as discussed by Melpignano (**see pars

[16]-[18]**).

Consider claim 27, (Currently amended) Ahmavaara discloses a system, comprising:

means for initiating requests for credential information from a subscriber identity module (SIM)

associated with a general packet radio service (GPRS) (**see the abstract, figures 1 and 2, pars [8]-

[18], [25]-[31] and [34]**).

means for authenticating access to a new wireless local area network (WLAN) using the

credential information (**see the abstract, figures 1 and 2, pars [8]-[18], [25]-[31] and [34]**); and

means for switching data services from a GPRS connection to a WLAN connection after the

access to the WLAN is authenticated (**see the abstract, figures 1 and 2, pars [8]-[18], [25]-[31] and

[34]**);

Ahmavaara does not specifically show an adapter. It is noticeable Ahmavaara teaches the

method of multiple simultaneous connections to different services in different networks, i.e., WLAN

and GPRS networks of a user equipment (**see the abstract, figures 1 and 2, par [16]**). In an analogous

art, Melpignano teaches an adapter (**see the abstract, pars [16], [18], [22], [62], where describing

the multi-standard wireless hardware adapted to support wireless operation of client devices, so

disclosing the existence of adapters**). Therefore, it would have been obvious to a person of ordinary

skill in the art at the time of the invention was made to modify Ahmavaara invention, and have an

adapter, as taught by Melpignano, thus improving wireless communication as discussed by Melpignano

(**see [16]-[18]**).

Consider claim 31, (New) Ahmavaara discloses a method, comprising:

issuing one or more requests to a Subscriber Identity Module (SIM) associated with a General

Packet Radio Service (GPRS) adapter using Extensible Authentication Protocol (EAP) **(sections [17],**

[27]);

arbitrating the one or more requests to the SIM when the SIM is busy ([15], [16], [28], [30]-

[33]);

receiving credential information stored in the SIM via a SIM reader driver ([30]-[33]);

utilizing the credential information to authenticate access to a new Wireless Local Area

Network (WLAN) using EAP **([8]-[18], [25]-[31] and [34]);**

establishing a WLAN connection with the WLAN via a WLAN adapter ([8], [16], [24]);

issuing a location update to switch data services from a GRPS connection to the WLAN

connection **([5], [8]-[18], [25]-[31]);** and

disconnecting from the GPRS connection **(sections [34]).**

Ahmavaara does not show an adapter, however, it is noticeable Ahmavaara teaches the method

of multiple simultaneous connections to different services in different networks, i.e., WLAN and GPRS

networks of a user equipment **(see the abstract, figures 1 and 2, par [16]).** Melpignano teaches an

(WLAN) adapter and (GPRS) adapter **(see the abstract, pars [16], [18], [22], [62], where describing**

the multi-standard wireless hardware adapted to support wireless operation of client devices, so

disclosing the existence of WLAN and GPRS adapters).

Since both Ahmavaara and Melpignano teach method and system for wireless communication in

multiple networks, it would have been obvious to a person of ordinary skill in the art at the time of the

invention was made to modify Ahmavaara invention, and have an adapter, taught by Melpignano, to

improve the wireless communication system discussed by Melpignano **(see pars [16]-[18]).**

Consider claim 32, (New) A computer-readable medium including machine readable

instructions that, if executed by a computer system, cause the computer system to perform a method

comprising:

issuing one or more requests to a Subscriber Identity Module (SIM) associated with a General

Packet Radio Service (GPRS) adapter using Extensible Authentication Protocol (EAP) (**sections [17]**,

[27]);

arbitrating the one or more requests to the SIM when the SIM is busy ([15], [16], [28], [30]-

[33]);

receiving credential information stored in the SIM via a SIM reader driver ([30]-[33]);

utilizing the credential information to authenticate access to a new Wireless Local Area

Network (WLAN) using EAP ([8]-[18], [25]-[31] and [34]);

establishing a WLAN connection with the WLAN via a WLAN adapter ([8], [16], [24]);

issuing a location update to switch data services from a GRPS connection to the WLAN

connection ([5], [8]-[18], [25]-[31]); and

disconnecting from the GPRS connection (**sections [34]**).

Consider claims 2, 10, as applied to **claims 1, 9** currently amended Ahmavaara, as modified by

Melpignano, further teaches issuing one or more requests via a smart card interface to get the

credential information (**see pars [30]-[32]**).

Consider claims 3, 11, as applied to **claims 2, 10**, Ahmavaara, as modified by Melpignano,

further teaches arbitrating the one or more requests to the SIM when the SIM is busy (**see pars [15]**,

[16], [28], [30]-[33]).

Consider claims 4, 12, as applied to, **claims 3**, currently amended, Ahmavaara, as modified by

Melpignano, further teaches the one or more requests are received by the SIM via a SIM reader driver

(**pars [8]-[18], [25]-[31] and [34]**, describing the usage of a SIM therefore inherently teaching a SIM

reader device).

Consider claims 5, 13, as applied to, **claims 4, 12**, further teaches receiving the credential

information from the SIM after the one or more requests are processed by the SIM (**pars [30]-[33]**,

Consider claims 6, 14, as applied to, **claims 1, 9**, Ahmavaara, as modified by Melpignano,

further teaches establishing a WLAN connection with the WLAN via a WLAN adapter (**pars [8], [16],**

[24]).

Consider claims 7, 15 as applied to, **claims 6, 14** Ahmavaara, as modified by Melpignano,

further teaches the WLAN connection is established while there is a connection to a GPRS network via the GPRS adapter (par [16]).

Consider claims 8, 16, as applied to, claims 7, 15 Ahmavaara, as modified by Melpignano, further teaches issuing a location update to switch data services from the GPRS network to the WLAN (see the abstract, figures 1 and 2, pars [5], [8]-[18], [25]-[31]); and teaches disconnecting from the GPRS network (pars [181]-[183], describing link quality decreased and switching to other networks, so teaching disconnetivity from the GPRS network).

Consider claim 18, as applied to, claim 17, Ahmavaara, as modified by Melpignano, teaches the requests for the credential information are communicated to the SIM via a smart card interface (figures 1, 3 and 12, pars [29], [30], [34], [60], [62], [64]).

Consider claim 19, as applied to, claim 18, Ahmavaara, as modified by Melpignano, wherein the requests for the credential information are received by the SIM via a SIM reader driver (figures 1, 3 and 12, pars [29], [30], [34], [60], [62], [64]).

Consider claim 20, as applied to claim 19, Ahmavaara, as modified by Melpignano, further teaches the GPRS adapter includes a SIM access module (SAM) to arbitrate the request for the credential information to the SIM (see pars [15], [16], [25], [28], [30]-[33]).

Consider claim 21, as applied to claim 20, Ahmavaara, as modified by Melpignano, further teaches the SAM arbitrates the requests for the credential information to the SIM while there is a GPRS connection to a GPRS network via the GPRS adapter (see pars [15], [16], [25], [28], [30]-[33]).

Consider claim 22, as applied to claim 21, Ahmavaara, as modified by Melpignano, further teaches wherein the mobility client is further to issue a location update after the access to the WLAN is authenticated and a WLAN connection is established (pars [5] and [28]).

Consider claim 23, as applied to claim 22, Ahmavaara, as modified by Melpignano, teaches the mobility client is further to drop the GPRS connection (pars [181]-[183]).

Consider claim 25, as applied to claim 17, Ahmavaara, as modified by Melpignano, teaches wherein the WLAN adapter and the GPRS adapter are installed an open platform (see pars [18], [49]-[50]).

Consider claim 26, as applied to **claim 17**, Ahmavaara, as modified by Melpignano, teaches wherein the WLAN adapter and the GPRS adapter are combined into one module (**see figures 2, 3, pars [36]-[40], [45]-[47], [92], [98]**).

Consider claim 28, claim 27, Ahmavaara, as modified by Melpignano, further teaches said means for requesting the credential information from the SIM includes means for arbitrating requests to the SIM (**see pars [15], [16], [28], [30]-[33]**).

Consider claim 29, as applied to **claim 28**, Ahmavaara, as modified by Melpignano, further teaches wherein said means for switching data services between the GPRS connection and the WLAN connection includes means for performing a location update (**pars [5] and [28]**).

Consider claim 30, as applied to **claim 27**, Ahmavaara, as modified by Melpignano, further teaches means for interfacing with the SIM to send the request for the credential information (**pars [28], [30]-[33]**).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy C. Ho whose telephone number is (571) 270-1108. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call 800-786-9199 (IN

USA OR CANADA) or 571-272-1000.

***

DUC M. NGUYEN
SUPERVISORY PRIMARY EXAMINER
TECHNOLOGY CENTER 2600